# GREEN BUILDING TOURS

September 18, 2009

Greater Houston Area Chapter

Greater Houston Partnership

## GREEN BANK CORPORATE HEADQUARTERS AND GREENBRIAR BRANCH BANK HOUSTON, TX

**100%** irrigation water reduction

**86%** construction waste diverted from landfill

**92%** work spaces with exterior views


### LEED ® Facts

Green Bank Corporate Headquarters
and Greenbriar Branch Bank
Houston, TX

LEED for New Construction Version 2.2
Certification awarded December, 2008

| **Gold** | **42*** |
|---|---|
| Sustainable Sites | 7/14 |
| Water Efficiency | 4/5 |
| Energy & Atmosphere | 9/17 |
| Materials & Resources | 6/13 |
| Indoor Environmental Quality | 11/15 |
| Innovation in Design | 5/5 |

**Out of a possible 69 points.*

# PROJECT PROFILE

## GREEN BANK CORPORATE HEADQUARTERS AND GREENBRIAR BRANCH BANK

# Green Banking and Building from the Ground Up

### Green Bank's LEED® Gold Headquarters exemplifies commitment to sustainability

## DESIGN OBJECTIVES

The goal was a facility that represents visually, physically and operationally Green Bank's core values and focus on sustainability. This facility is healthier, more productive, more satisfying and more resource efficient than traditional banking offices. It is a tangible representation of how Green Bank functions, delivers services, values its staff and builds towards the future.

## LEED CATEGORY SUMMARY HIGHLIGHTS

### Sustainable Sites Category

Built on a former gas station site, the headquarters is an entry to established neighborhoods and a thoroughfare to Rice University. The central location offers employees public transportation access and local amenities and services. A hybrid-powered car is used for inter-branch deliveries and low-emitting vehicles are encouraged with preferred parking. A bike rack, shower and changing room are available employees to bike or jog to work. To reduce the "heat island" effect, light colored pavement and white-colored roofing have been installed.

### Water Efficiency Category

Special emphasis was placed on potable water conservation. The use of low flow plumbing fixtures and faucets reduces indoor water consumption. Rainwater runoff from the roofs is collected in an underground cistern and used for irrigation of drought-resistant landscaping.

### Energy & Atmosphere Category

During design, computer simulation was used to optimize building energy performance and high-efficiency HVAC and lighting systems were chosen to minimize energy consumption. Only renewable electricity is used; it is monitored and tracked on-site and allows continual adjustments for optimal energy usage. Ozone-friendly refrigerants are used in the building.

### Materials & Resources Category

Managing construction resources was an important goal--more than 80 percent of construction waste was collected for recycling. Likewise, building trash is sorted daily. Building materials with recycled content or produced regionally have also been used: translucent space divider panels made from recycled plastic bottles, East-Texas cypress wood ceilings and walls of Hill Country stone.

### Indoor Environmental Quality Category

Creating a healthy and productive work environment was also important in building design. Entry walk-off grates and mats reduce dirt tracking into the building. The HVAC system uses high-efficiency filtration while CO2 monitors make continuous adjustments for optimal air quality. Multiple HVAC zones and workspace lighting controls allow for individualized comfort. Exhaust fans remove airborne contaminants from janitorial and copy rooms. Low VOC-emitting materials were selected for floorings, paints, stains and finishes.

### Innovation & Design Category

Additional points were earned by specifying green cleaning products for maintenance, using the building as an education tool with informative signage and by choosing "Green Guard"-certified furniture.

"Building a LEED® headquarters was fundamental to our green identity. We looked at the project as a differentiator — when clients and employees walk in the door, they know we're different, adaptable, relevant and focused on the future."

Manny Mehos
Founder, Green Bank

| | |
|---|---|
| **Architect:** | Vanderwal Architects |
| **Structural Engineer:** | Pinnacle Structural |
| **MEP Engineer:** | KO Design Engineering / Graves Mechanical |
| **Civil Engineer:** | Jones and Carter |
| **General Contractor:** | Humphries Construction Corp. |
| **Landscape Architect:** | Wong & Associates |
| **Commissioning Agent:** | Apollo BBC |
| **LEED Consultant:** | Green Building Services, Inc. |
| **Sustainablity Consultant:** | Momentum Bay |
| **Green Power Broker:** | Green Power 4 Texas |

| | |
|---|---|
| **Building / Site area:** | 20,000 sf , 4 floors / 0.6338 acre site |
| **General Construction Cost:** | $5,300,000 |
| **Construction cost per square foot:** | $265 |

**TIME TABLE:**

| | |
|---|---|
| **Construction Start:** | January 2007 |
| **Construction Completion:** | Earth Day, 2008 |
| **LEED Gold Certification Awarded:** | December 16, 2008 |
| **Public Celebration:** | September 18, 2009 |

## ABOUT LEED:

The Leadership in Energy and Environmental Design (LEED) rating system was developed by the Unites States Green Building Council (USGBC). The point-based "green building" rating system encourages sustainable design and implementation. It has been accepted world-wide as a leading method to quantify and qualify resource and well-being conscious design and construction.

**www.usgbc.org**
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